

ExxonMobil Refining & Supply - Global Remediation
JOB SAFETY ANALYSIS Revised September 2012

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State) Former East Chicago Terminal- PIPING INSTALLATION	DATE Rev. 9/12/12	<input type="checkbox"/> NEW <input checked="" type="checkbox"/> REVISED	PAGE 1 of 2
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WORK ACTIVITY (Description):
Install new pipeline for Treatment Facility skid to new tie-in points as on Figure 2 Prints. Dated 3/28/12

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Mark Shell;	Foreman	Aron Yakima	Project Manager
Chris Kreis	Rachke Foreman	Don Stern	Project Engineer
Mike Adermann	V.P. Operations	Michael Meyers	Imperial Crane Operator

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT (SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

<input checked="" type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input checked="" type="checkbox"/> GLOVES – (Leather Material Handling)
<input checked="" type="checkbox"/> HARD HAT	<input checked="" type="checkbox"/> FACE SHIELD-When Grinding	<input type="checkbox"/> SUPPLIED RESPIRATOR	<input checked="" type="checkbox"/> Welding Gloves-Grinding & Welding
<input type="checkbox"/> LIFELINE / HARNESS	<input checked="" type="checkbox"/> HEARING PROTECTION-Ear Plugs	<input checked="" type="checkbox"/> PPE CLOTHING	<input checked="" type="checkbox"/> OTHER-ANSI Approved Welding Helmet
<input checked="" type="checkbox"/> SAFETY GLASSES	<input checked="" type="checkbox"/> Steel Toed / Composite Safety Shoes With Defined Heel		

¹ JOB STEPS	² POTENTIAL HAZARDS	³ CRITICAL ACTIONS TO MITIGATE HAZARDS
1. Receive PTWs	Injury / damage as a result of personnel not understanding permit conditions	-All personnel trained in PTW system and understand permit conditions -Discuss safest work procedure with crew, Review TSTI/JSA with crew for special site specific tools and equipment to use
2. Set up welding leads and welder and 240 volt leads	Injury due to electrocution Electric Shock Slip, Trips and Falls.	Place welding machine on level ground. Ensure all equipment is correctly tagged. Inspect all leads and tools prior to use. Splices, repaired insulation, etc., must be within 10 feet of the rod holder. Leads shall not be placed near high voltage wires Ensure all leads are elevated on insulated hooks and are not left on the ground.
3. Welding, Cutting & Grinding	Eye Injury Fire Hazards caused by burns, sparks and flashes	Hot Work Permit must be available and properly completed. Provide a fire watch equipped with Fire Extinguisher during and 30 minutes after welding, cutting and grinding. Flush Lines prior to cutting, welding and grinding. Combustible material must be screened from slag, heat and sparks. Compressed gas cylinders shall be separated from flammable or combustible material by at least 35 feet. Follow hot work procedures, fire extinguisher, gas testing, cover drains, use fire spotter, assess welding habitat. Proper helmets, goggles, aprons, and gloves shall be available for welding and cutting operation. Use Correct PPE (ANSI approved welding helmet (and cutting goggles, for cutting) welding jackets, aprons, welding gloves. Workers and public shall be shielded from rays, flashes, sparks, molten metal and slag. Proper measures to be taken for Fire Control

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4.	High Noise Levels	Use of hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8 hour work period). Assess noise levels with EXTECH sound level meter if possibility exists that level may exceed 85 dBA TWA.
5. Lifting pipes into position using 28 Ton Manitex (2801 C Series) Boom Truck Crane	Refer to JSA Crane Pipe Installation Job Safety Analysis	Refer to Crane Pipe Installation Job Safety Analysis
6.		
7.		

¹ Each Job or Operation consists of a set of steps. Be sure to list all the steps in the sequence that they are performed. Specify the equipment or other details to set the basis for the associated hazards in Column 2

² A hazard is a potential danger. What can go wrong? How can someone get hurt? Consider, but do not limit, the analysis to: **Contact** - victim is struck by or strikes an object; **Caught** - victim is caught on, caught in or caught between objects; **Fall** - victim falls to ground or lower level (includes slips and trips); **Exertion** - excessive strain or stress / ergonomics / lifting techniques; **Exposure** - inhalation/skin hazards. Specify the hazards and do not limit the description to a single word such as "Caught"

³ Aligning with the first two columns, describe what actions or procedures are necessary to eliminate or minimize the hazards. Be clear, concise and specific. Use objective, observable and quantified terms. Avoid subjective general statements such as, "be careful" or "use as appropriate".